<< 2024-2025 AUTUMN >>

Breadth Subjects

Pink colour indicates, no seats are available (only for breadth subject).

Guidelines for choosing Breadth Elective:

Criteria for choosing breadth electives:

Students in the New Curricula can choose any subject from the parent department, other than Departmental Core (Depth Core) and Departmental Elective (Depth Elective) or from any other department, subject to satisfying the level criteria and pre-requisite criteria.

Level Criteria:

Students at 2nd year cannot take 600 level subjects, i.e., the subjects starting with 6 number (e.g., CS60001 etc.), except those offered by Rekhi Centre of Excellence in Science of Happiness and Humanities and Social Sciences.

Pre-requisite Criteria:

As prescribed by the subject teachers for a specific subject, if any At present on ERP-Academic->Subjects->Breadth List for Current Semester: displays few subjects. However, a student can select any other subject in addition to those listed under Breadth List as per the criteria mentioned above. Note: For some of the subjects, there may be a constraint in terms of maximum intake.

ubject No	Subject Name	L-T-P	Pre-requisite 1	Pre-requisite 2	Pre-requisite 3	Offered By	Slot	Room
	Management							
60007	TECHNO-ENTREPRENEURIAL LEADERSHIP	3-0-0				RJ	{D3}	NC321
60021	ENGINEERING B-PLAN DEVELOPMENT - 1	2-1-0				RJ	{F3}	NC441
60025	SPECIAL TOPICS IN ENTREPRENEURSHIP	2-1-0				RJ	{B3}	NR311
60029	SMALL BUSINESS DEVELOPMENT	2-0-1				RJ	(G3)	NC142
								NR213
60038	ENTREPRENEURSHIP IN SOCIAL SECTOR	2-1-0					{E3}	
60044	FRUGAL ENGINEERING	3-0-0				RJ	{E3}	NC341
60201	DIGITAL ENTREPRENEURSHIP	3-0-0				RJ	{G3}	NR421
61201	ENTREPRENEURSHIP ESSENTIALS	3-1-0				RJ	{S3,B3}	NR122
61203	FINANCIAL AND LEGAL ASPECTS OF NEW TECHNOLOGY VENTURES	3-1-0				RJ	{D4}	NR323
61205	INNOVATION IN PRODUCT DEVELOPMENT PROCESS	3-1-0				RJ	{F4}	NR424
50213	PRINCIPLES OF SAFETY ENGINEERING	3-0-0				IM	{G3}	208 (E1)
61003	HUMAN FACTORS ENGINEERING	3-1-0					{V4}	208 (E1)
51207	APPLIED MULTIVARIATE STATISTICAL MODELLING							215 (C3)
01207		3-1-0				IIVI	{D4}	215 (C3)
	HSS							
20002	GENERAL PSYCHOLOGY	3-1-0				HS	{E4}	NR412
20004	POSITIVE PSYCHOLOGY	3-1-0				HS	{E4}	NR121
20016	ENVIRONMENTAL HUMANITIES	3-0-0				HS	{B3}	NC314
30036	INTERCULTURAL COMMUNICATION	3-1-0				HS	{C4}	
30050	SOCIO-TECHNICAL INTERVENTIONS FOR AGEING SOCIETIES	3-0-0				HS	(B3)	
30054	SOCIOLOGY OF RESOURCE MANAGEMENT	3-0-0					(G3)	NC312
30071	APPLIED ORGANISATIONAL PSYCHOLOGY	3-0-0					(G3)	NOOSE
30074	SCIENCE AND HUMANISM	3-0-0					{G3}	NC313
30075	MODERNISATION AND CREATIVE COMMUNICATION	3-0-0				HS	{G3}	
30209	CONTEMPORARY WORLD POETRY	3-0-0				HS	{G3}	
31076	INTRODUCTION TO LANGUAGE AND LINGUISTICS	3-1-0				HS	{S3,B3}	
40072	SOCIOLOGY OF SCIENCE	3-0-0				HS	{G3}	NR113
51604	GERMAN	3-0-0				HS	(B3)	
	INTRODUCTION TO INDIAN PSYCHOLOGY							NC334
60005		3-0-0					{G3}	NC334
61080	TOOLS AND TECHNOLOGIES FOR LANGUAGE DOCUMENTATION	3-1-0					{S3,G3}	
10001	UNDERSTANDING INDIA: INDIAN ETHOS AND KNOWLEDGE SYSTEM - I	2-0-0				KS	{B2}	NR114
11001	SANSKRIT	3-1-0				KS	{A3,S3}	NR114
32201	THE ESSENCE OF THE UPANISHADS	2-0-2				KS	{C4}	V4
60206	THE GNOSTIC FOUNDATIONS OF YOGA: THEORIES AND APPLICATIONS	3-0-0				KS	{F3}	V3
	Breadth							
60007	GRAPH MACHINE LEARNING: FOUNDATIONS AND APPLICATIONS	3-0-0	AI61002	CS60010		Al	{G3}	NR213
			AIUIUUZ	C300010				
0205	INTERPRETABLE MACHINE LEARNING	3-0-0				Al	{C3}	NR213
0209	AI/ML FOR ROBOT AUTONOMY	4-0-0				Al	{V4}	NR213
1003	LINEAR ALGEBRA FOR AI AND ML	3-1-0	MA10001	MA10002		Al	{F4}	NR123
61004	STATISTICAL FOUNDATION FOR ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING	3-1-0	AI42001	CS60050		Al	{D4}	NC434
1005	ARTIFICIAL INTELLIGENCE: FOUNDATIONS AND APPLICATIONS	3-1-0				Al	{A3,S3}	NR121
1201	VISUAL COMPUTING WITH AI/ML	3-1-0				Al	{E4}	NR313
30001	FUNDAMENTALS OF EMBEDDED CONTROL AND SOFTWARE	3-0-0				AT	{S3}	NC141
		4-0-0				AT		NC424
50001	EMBEDDED CONTROL SYSTEMS						{C4}	
50003	EMBEDDED SOFTWARE DESIGN & VALIDATION	4-0-0				AT	{E4}	NC423
50005	EMBEDDED MACHINE LEARNING	3-0-0					{U3}	NC241
60201	PRINCIPLES OF AUTOMOTIVE DYNAMICS AND CONTROL	3-0-0				AT	{D3}	NC244
60203	EMBEDDED CONTROL OF ELECTRICAL DRIVES: DESIGN AND IMPLEMENTATION	3-0-0				AT	{H3}	NC142
50205	PHOTONIC QUANTUM INFORMATION TECHNOLOGIES	3-0-0				AT	{S3}	NC424
52001	INTRODUCTION TO AUGMENTED REALITY AND VIRTUAL REALITY	2-0-2				AT	{D4}	NR214
	ADVANCED FLUID DYNAMICS	3-1-0				CH	(E4)	NR222

61015	ADVANCED MATHEMATICAL TECHNIQUES IN CHEMICAL ENGINEERING		MA20101	MA20102		CH	{C4}	V1
61017	RHEOLOGY OF COMPLEX FLUIDS	3-1-0				CH	{S3,B3}	NC422
62001	OPTIMIZATION TECHNIQUES IN PROCESS DESIGN	3-1-0				CH	{D4}	
62007	INDUSTRIAL POLLUTION CONTROL	3-0-0				CH	{B3}	NC421
62009	PETROLEUM REFINERY ENGINEERING	3-0-0				СН	{D3}	NC224
62010	PETROCHEMICAL TECHNOLOGY	3-0-0				СН	(D3)	NC311
62021	MULTIPHASE FLOW	3-1-0				CH		NC324
							(F4)	
62046	MANUFACTURING & CHARACTERISATION OF POLYMER MATRIX COMPOSITES	3-1-0				CH	{F4}	NC112
62047	CFD APPLICATIONS IN CHEMICAL PROCESSING	3-1-0				CH	{F4}	NC422
62049	MICROSCALE TRANSPORT PROCESSES	3-0-0				CH	{D3}	NR124
71002	COMPUTATIONAL MODELING OF MULTIPHASE REACTIVE FLOWS	3-1-0				СН	{B3,S3}	NC324
	CARBON CYCLE AND GLOBAL CLIMATE CHANGE	3-0-0				CL	{A3}	Class Room-2
ь0019	PHYSICAL OCEANOGRAPHY AND CLIMATE	3-0-0				CL	(A3)	Class Room-3
60201		3-0-0				CL	{B3}	Class Room-2
60201 60203	AGRICULTURAL METEOROLOGY					CL	{D3}	Class Room-3
60201 60203 60205	TECTONICS AND FLUVIAL DYNAMICS	3-0-0						
60201 60203 60205		3-0-0 3-0-0				CL	{B3}	Class Room-3
60201 60203 60205 60207	TECTONICS AND FLUVIAL DYNAMICS					CL CL	{B3} {E3}	
60019 60201 60203 60205 60207 60209 61015	TECTONICS AND FLUVIAL DYNAMICS WEATHER ANALYSIS & PREDICTION	3-0-0						Class Room-2
60201 60203 60205 60207 60209	TECTONICS AND FLUVIAL DYNAMICS WEATHER ANALYSIS & PREDICTION DYNAMICS OF PLANETARY AND MARINE BOUNDARY LAYER	3-0-0 3-0-0				CL	{E3}	Class Room-2 Class Room-3 Class Room-3 Class Room-2

	CL61205	GEOPHYSICAL FLUID DYNAMICS	3-1-0			CL	{C4}	Class Room-2 (704)
STREAMS STREAMS NO NEW PRINCES 1940	CR61001	INTRODUCTION TO CRYOGENICS AND SUPERCONDUCTIVITY	3-1-0			CR	{D4}	CRYO-201
PATENTIAL PROPERTY NEW PROPER	CR61003	CRYOGENIC LIQUEFACTION SYSTEMS AND CRYOCOOLERS	3-1-0			CR	{C4}	CRYO-201
Persistant	CR61013	STORAGE AND TRANSFER OF CRYOGENS	3-0-0			CR	{U3}	CRYO-201
CR102121 MATTER AT LOW TEMPERATURES 3-0-0 CR (E) CR7-0201 CR102122 SAFETY SISSIES WITH CHTOGENIC FLUIDS 3-0-0 CR (C) (C) CR7-0201 CR102122 BIOLOGICAL INGREAM COLEMISTRY 3-1-0 CY (S) (S) CY01225 BIOLOGICAL INGREAM COLEMISTRY 3-1-0 CY (S) (S) CY01227 BIOCHYSTOL, CHEMISTRY 3-1-0 CY (S) (N22 CY01227 BIOCHYSTOL, CHEMISTRY 3-1-0 CY (S) (N22 EF22201 INTRODUCTION TO INDIVIDUAL CHEMISTRY 2-1-0 PM2121 CY (S) (N22 EF22201 INTRODUCTION TO INDIVIDUAL CHEMISTRY 2-1-0 PM2121 CY (S) (N22 EF22021 INTRODUCTION TO INDIVIDUAL CHEMISTRY 3-1-0 R AT (4) N22 EF22021 INTRODUCTION TO INDIVIDUAL CHEMISTRY 3-1-0 M (M (G) N22 MA10222 CANALA CHEMISTA A (M (C) N22 </td <td>CR61017</td> <td>CRYOGENIC HEAT TRANSFER DEVICES</td> <td>3-0-0</td> <td></td> <td></td> <td>CR</td> <td>{A3}</td> <td>CRYO-201</td>	CR61017	CRYOGENIC HEAT TRANSFER DEVICES	3-0-0			CR	{A3}	CRYO-201
GRBIDED MATTER AT LOW TREMPEATURES 940 GR CR	CR61019	VACUUM TECHNOLOGY	3-0-0			CR		CRYO-201
GREEDIZ SARETY ISSUES WITH CRYOGENO CHUIUS 29.0 CR CR (8) CRYO (2013) CRRIJOSIS SUPERCONDICTING MAGNETS DESIGN AND APPLICATION 3.0 C CRY (2014) (10) CRY (2014) CRY	CR61021	MATTER AT LOW TEMPERATURES	3-0-0			CR		CRYO-201
CR65025 SUPERCONDUCTIONS MARKETS DESIGN AND APPLICATION 3-0 C C C CM		SAFETY ISSUES WITH CRYOGENIC FLUIDS				CR		CRYO-201
CY51050 BICCITOCICAL BIOGRANIC CIEMSTRY 31-0 C CY (3) CY 10-0 CY (4) CY								
CYSIZIT BICHTROCHEMICAS ENSORS AND BIOSENSORS 9-10 CY (4) NOTIZE CYSIZIT BIOHYPISCAL CHEMISTRY 3-10 CY11009 PH21212 CY (4) NC122 CP12272 ADMANED QUANTUM CHEMISTRY 3-10 CY11009 PH21212 CY (4) NC32 EP21201 INTRODUCTION TO DIGITAL PROBED SHAPER 2-10 3-10 CY (4) NC32 FH6202 INTRODUCTION TO DIGITAL PROBED SHAPER 3-10 CY CY (4) NC12 FH6202 IMBEDDED SYSTEM DESIGN FOR AFFORDABLE HEALTHCARE 3-0 CY CY MA (6) NC12 MA0222 CPHIMAZHONI TECHRIQUES 3-0 CY CY MA (6) NC22 MA60223 CHIMAZHONI TECHRIQUES 3-0 CY MA (6) NC32 MA60225 CHIMAZHONI TECHRIQUES 3-0 CY MA (6) NC32 MA60226 CHIMAZHONI TECHRIQUES 3-0 CY MA (8) NC32 <tr< td=""><td>CY61203</td><td>BIOLOGICAL INORGANIC CHEMISTRY</td><td></td><td></td><td></td><td>CY</td><td></td><td></td></tr<>	CY61203	BIOLOGICAL INORGANIC CHEMISTRY				CY		
CY5127 BIOPHYSICAL CHEMISTRY 3-10 CY1000 PR2121 CYC QC	CY61205	ELECTROCHEMICAL SENSORS AND BIOSENSORS	3-1-0			CY		
CY512727 ADVANCED QUANTUM CHEMISTRY 3.10 CY41099 P121212 CY (3) NG4 NC422 EP212012 INTRODUCTION TO NONOVATION AND WITTERPEREURSHIP 2.10 CH CH </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>. ,</td> <td>NC112</td>							. ,	NC112
Page				CY41009	PH21212			
FINE PRODUCTION TO DIGITAL SPEECH PROCESSING 3-0 6-0 7-0						RJ		NC342
FH62201 BMBEDDED SYSTEM DESIGN FOR AFFORDABLE HALTHCAPE 2-0.2 M.M. (M.) M.M. (D.) No.121 MAL1005 LINEAR ALGEBRA 3-10.0 3.0 M.M. (D.) NA.D. (3) VA MA60231 CONVEX OPTIMIZATION 3-0 0.0 M.M. (R.) N.M. (R.) N.M.D. MA60225 FINANCIAL MATHEWATICS 3-0 0.0 M.M. (R.) N.M. (R.) N.M.D. MA60225 FINANCIAL MATHEWATICS 3-0 0.0 M.M. (R.) N.M.D. N.D.22 MA60226 CRISTOGRAPHY AND NETWORK SECURTY 3-0 0.0 M.M. (R.) N.M.D. N.P.12 MA60263 CRYPTOGRAPHY AND NETWORK SECURTY 3-0 0.0 M.M. (R.) N.M.D. N.P.12 MA60263 CRYPTOGRAPHY AND NETWORK SECURTY 3-0 0.0 M.M. (R.) N.M.D. N.P.12 MA60264 CRYPTOGRAPHY AND NETWORK SECURTY 3-0 0.0 M.M. (R.) N.M.D. N.D.12 MA60265 OPTIMIZATION METHODS IN FINANCE 3-0 0.0 M.M.D. M.M.D. R.D.12			3-1-0					
MA10105 LINEAR ALGEBRA 3.1-0 M.M. (3.0) M.M. <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
MA30227 OPTIMIZATION TECHNIQUES 3-0 MA (C3) V3 MA60223 CONNEX OPTIMIZATION 3-0 MA (C3) N324 MA60229 CALOISTHEMITCS 3-0 MA (C3) N324 MA60229 CALOISTHEMITCS 3-0 MA (C3) N323 MA60229 CALOISTHEMITCS 3-0 MA (C3) N323 MA60221 CYPTOGRAPHY AND NETWORK SECURITY 3-0 MA (C3) N1214 MA60283 MULTIVARIATE STATISTICAL METHODS 3-0 MA (C3) N1214 MA60283 OPTIMIZATION METHODS IN PRINACE 3-0 MA (C3) N323 MA60284 OPTIMIZATION METHODS IN PRINACE 3-0 MA (C3) N322 MA60299 MODERN THEORY OF PARTIAL DIFFERENTIAL EQUATIONS 3-0 MA (C3) N323 MA61020 CONDUTATIONAL GEOMETRY 3-1 MA (C3) N422 MA71033 CALOIS THEORY 3-1 MA (C3) N521 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>{D4}</td> <td>NC121</td>							{D4}	NC121
MA60213 CONVEX OPTIMIZATION 3-0 INA MA (F3) NESTAGE MA602225 FINANCIAL MATHEMATICS 3-0 INA MA (F3) NE313 MA60225 FINANCIAL MATHEMATICS 3-0 INA MA (F3) NE313 MA60251 NUMBER THEORY 3-0 INA (B3) NE222 MA60261 CHYPTOGRAPHY AND NETWORK SECURITY 3-0 INA (B3) NE222 MA60263 MULTIVARIATE STRISTICAL METHODS 3-0 INA (B3) NE121 MA60269 OPTIMIZATION METHODS IN FINANCE 3-0 INA (B3) NE311 MA60279 MODERN THEORY OF PRATIAL DIFFERENTIAL EQUATIONS 3-0 INA (B3) NR323 MA61027 COMPUTATIONAL GEOMETRY 3-0 INA (B3) NR323 MA61028 COMPUTATIONAL GEOMETRY 3-0 INA (B3) NR323 MA61029 CONCE FRACTURE MECHANICS 3-0 INA (B3) NS121 MA5029 ENINGATION ME	MA30227	OPTIMIZATION TECHNIQUES	3-0-0			MA	` '	
MA60225 FINANCIAL MATHEMATICS 3-0 IMBORD BY MA (P3) N333 MA60251 SUBSITHEORY 3-0 IMBORD BY NC222 NC222 MA60261 CRYPTOGRAPHY AND NETWORK SECURITY 3-0 IMBORD BY MA (C3) NC222 MA60263 CRYPTOGRAPHY AND NETWORK SECURITY 3-0 IMBORD BY MA (C3) NC124 MA60263 CRYPTOGRAPHY AND NETWORK SECURITY 3-0 IMBORD BY MA (C3) NC124 MA60269 OPTIMIZATION METHODS IN FINANCE 3-0 IMBORD BY MA (G3) NC311 MA60279 MODERN THEORY OF PARTIAL DIFFERENTIAL EQUATIONS 3-0 IMBORD BY MA (G3) NC323 MA61029 MODERN THEORY OF PARTIAL DIFFERENTIAL EQUATIONS 3-0 IMBORD BY IMBORD BY <td></td> <td>-</td> <td></td> <td></td> <td></td> <td></td> <td>` '</td> <td></td>		-					` '	
MA60229 GALOIS THEORY 3-0 C C C MA (73) NC313 MA60251 NUMBER THEORY 3-0 C C C MA (83) NC222 MA60261 CRYPTOGRAPHY AND NETWORK SECURITY 3-0 C C MA (83) NR124 MA60263 MULTWARIATE STATISTICAL METHODS 3-0 C C MA (63) NC121 MA60275 ADVANCED FLUID DYVAMICS 3-0 C C MA (13) NC121 MA60275 ADVANCED FLUID DYVAMICS 3-0 C C MA (43) NC311 MA60276 ADVANCED FLUID DYVAMICS 3-0 C C MA (43) NC312 MA60276 ADVERTINE MECONITIES MECONITIES 3-0 C C MA (47) NC313 MA50104 RISK AND RELIABILITY ENGINEERING 3-0 ME2201 MA (53) NC22 M160227 APLIED AI, M. & DI TECHNIQUES 3-0 ME2201								NR324
MA60251 NUMBER THEORY 3-0 0 0 MA (E3) NC222 MA60262 CRYPTOGRAPHY AND NETWORK SECURITY 3-0 0 0 MA (B3) RILIZA MA60263 MULTIVARIATE STATISTICAL METHODS 3-0 0 0 MA (G3) NC121 MA60275 ADVANCED FLUID DYNAMICS 3-0 0 0 MA (G3) NC321 MA60279 MODERN THEORY OF PARTIAL DIFFERENTIAL EQUATIONS 3-0 0 0 MA (G3) NC321 MA61027 MODUTATIONAL GEOMETRY 3-0 0 0 MA (F3) NC121 MA61021 COMPUTATIONAL GEOMETRY 3-0 0 0 MA (F3) NC121 MA61021 COMPUTATIONAL GEOMETRY 3-0 0 0 MA (F3) NC121 MA61021 COMPUTATIONAL GEOMETRY 3-0 0 0 MA (F3) NC121 MA61021 RISKAD RELIABITY ERIGINEERING 3-0 0 0								
MA60261 CRYPTOGRAPHY AND NETWORK SECURITY 3-0 MA (83) NR124 MA60263 MULTURARIZE STATISTICAL METHODS 3-0 MA (63) NC121 MA60269 OPTIMIZATION METHODS IN FINANCE 3-0 MA (63) NC211 MA60273 ADVANCED FLUID DYNAMICS 3-0 MA (43) NC311 MA60273 MODERN THEORY OF PARTIAL DIFFERENTIAL EQUATIONS 3-0 MA (43) NC313 MA61021 OPTIMIZATION METHODS IN FINANCE 3-0 MA (43) NC21 M160041 RISK AND RELIABILITY ENGINEERING 3-0 MI (43) M160217 ENVIRONMENTAL ENGINEERING 3-0 MI (53) M160227 APPLIED AJ, M. & DI TECHNIQUES 3-0 MI (53) M160227 APPLIED AJ, M. & DI TECHNIQUES 3-0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
MAG0263 MULTIVARIATE STATISTICAL METHODS 3-0 C MA (3) C MAG0275 ADVANCED FILID DYNAMICS 3-0 C MA (3) NC121 MAG0275 ADVANCED FILID DYNAMICS 3-0 C MA (3) NC31 MAG0279 MODERN THEORY OF PARTIAL DIFFERENTIAL EQUATIONS 3-0 C MA (4) R23 MAG1021 COMPUTATIONAL GEOMETRY 3-0 C C MA (4) NC31 MAG1023 CALDISTINEORY 3-0 C C MA (4) NC32 M60041 RISK AND RELIABILITY ENGINEERING 3-0 MI2101 CE1201 MI (53) C M60227 PENDEDAJ M. & EU TECHNIQUES 3-0 MI2101 CE1201 MI (53) C M60227 PENDEDAJ M. & EU TECHNIQUES 3-0 MI (3) C MI (3) C M60226 RISK AND RELIABILITY ENGINEERING 3-0 MI (3) C MI								
MA60269 OPTIMIZATION METHODS IN FINANCE 3-0-0 MA (F3) NC121 MA60275 ADVANCED FLUID DYNAMICS 3-0-0 MA (U3) NC311 MA60275 ADVANCED FLUID DYNAMICS 3-0-0 MA (U3) NC321 MA60276 COMPUTATIONAL GEOMETRY 3-0-0 MA (F4) NC212 MA1021 OPTIMIZATION METHODS IN FINANCE 3-0-0 MA (F4) NC121 MA7103 GALOIS THEORY 3-0-0 MA (F4) NC121 M160214 RISK AND RELIABILITY ENGINEERING 3-0-0 MI2201 MM (G3) MC121 M160217 ENVIRONMENTAL ENGINEERING 3-0-0 MI2201 MM (G3) MC121 M160227 APPLIED AI, ML & DI TECHNIQUES 3-0-0 MM (G3) MC121 M160238 RISK AND RELIABILITY ENGINEERING 3-0-0 MM (G3) MC431 M160239 ROLK KARTERILA BINGHERING 3-0-0 MM (G3) MC432 M160231 RISK AND RELIAB								1111224
MA60275 ADVANCED FLUID DYNAMICS 3-0-0 C C MA (U3) NC311 MA60279 MODERN THEORY OF PARTIAL DIFFERENTIAL EQUATIONS 3-0-0 C C MA (G3) NR223 MA61061 OPTIMIZATION METHODS IN FINANCE 3-0-0 C MA (F4) C MA71003 GALOIS THEORY 3-0-0 C MI (G3) NC121 MI60041 RISK AND RELIABILITY ENGINEERING 3-0-0 MI (G2) MI (G3) MI60227 ENVIRONMENTAL ENGINEERING 3-0-0 MI (G2) MI (G3) MI60227 APPLIED AL, ML & DI TECHNIQUES 3-0-0 MI (G3) C MI60227 APPLIED AL, ML & DI TECHNIQUES 3-0-0 MI (G3) C MI60227 RISK AND RELIABILITY ENGINEERING 3-0-0 MI (G3) C MI60227 RISK AND RELIABILITY ENGINEERING 3-0-0 MI (G3) NC443 MS50039 RISK AND RELIABILITY ENGINEERING 3-0-0								NC121
MA60279 MODERN THEORY OF PARTIAL DIFFERENTIAL EQUATIONS 3-0-0 (S) MAS (G) NR323 MA61024 COMPUTATIONAL GEOMETRY 3-1-0 (S) MA (F4) (C) MA61061 OPTIMIZATION METHODS IN FINANCE 3-0-0 (S) (MA (F4) (NC121) MA71003 GALOIS THEORY 3-1-0 (S) (MA (V4) NC313 MI60041 RISK AND RELIABILITY ENGINEERING 3-0-0 (MI21201) CE21201 MI (G3) (C) MI60272 ROYIRONMENTAL ENGINEERING 3-0-0 (MI21201) CE21201 MI (G3) (C) MI60227 APPLIED AJ, ML & DI TECHNIQUES 3-0-0 (MI (G3) (C) (MI (G3) (C) MI60236 RISK AND RELIABILITY ENGINEERING 3-0-0 (MI (G3) (C) (MI (G3) (C) MI60237 APPLIED AJ, ML & DI TECHNIQUES 3-0-0 (MI (G3) (C) (C) (C) (C) (C) (C) (C) (C)								
MA61024 COMPUTATIONAL GEOMETRY 3-10 Seed of the composition of the compo								
MAB1061. OPTIMIZATION METHODS IN FINANCE 3-0-0 MA (F3) NC121 MA71003. GALOIS THEORY 3-1-0 MA (V4) NC313 MI60041. RISK AND RELIABILITY ENGINEERING 3-0-0 MI (2201) MI (633) GED MI60207. ENVIRONMENTAL ENGINEERING 3-0-0 MI (2201) CE21201 MI (83) GED MI60227. APPLIED AI, MI, & DL TECHNIQUES 3-0-0 MI (83) MI (63) GED MI60236. RISK AND RELIABILITY ENGINEERING 3-0-0 MI (83) MI (63) MI (63) MI60237. APPLIED AI, MI, & DL TECHNIQUES 3-0-0 MI (83) MI (63) MI (63) MI60238. RISK AND RELIABILITY ENGINEERING 3-0-0 MI (83) MI (63) MC443 MI60239. BULK MATERIAL SCIENCE 3-0-0 MI (83) MC443 MC443 MS31007. MATERIAL SCIENCE 3-0-0 MI (83) MC322 MC322 N550009. FUNDAMENTALS OF ELECTRONIC MATERIALS 3-0-0 MI (74) MC324 MC324								NR323
MA71003 GALOIS THEORY 3-1-0 MA (V.4) NC313 MI60041 RISK AND RELIABILITY ENGINEERING 3-0-0 MI21201 CE21201 MI (E3) MI60209 ROCK FRACTURE MECHANICS 3-0-0 MI21201 CE21201 MI (E3) MI60217 ENVIRONMENTAL ENGINEERING 3-0-0 MI (E3) CE21201 MI60227 APPLIED AI, ML & DI TECHNIQUES 3-0-0 MI (E3) CE21201 MI60238 RISK AND RELIABILITY ENGINEERING 3-0-0 MI (E3) CE21201 MI60238 RISK AND RELIABILITY ENGINEERING 3-0-0 MI (E3) CE21201 MI60238 RISK AND RELIABILITY ENGINEERING 3-0-0 MI (E3) NC443 MI60239 BULK MATERIAL HANDLING 3-0-0 MI (C3) NC422 MSS0009 FUNDAMENTALS SCIENCE 3-0-0 MS (H3) Seminar Room 1 NT61201 PUNDAMENTALS AND PROPERTIES OF NANOCLUSTERS 3-1-0 NT V/4 PC4001 <								NC121
MI60041 RISK AND RELIABILITY ENGINEERING 3-0-0 MI21201 CE21201 MI (63) CE21201 MI CE21201 CE21201 MI CE21201								
MI60209 ROCK FRACTURE MECHANICS 3-0-0 MI21201 CE21201 MI (E3) MI60217 ENVIRONMENTAL ENGINEERING 3-0-0 MI21201 CE21201 MI (E3) MI60227 APPLIED AI, ML& DL TECHNIQUES 3-0-0 MI (S3) C MI60238 RISK AND RELIABILITY ENGINEERING 3-0-0 MI (S3) NC443 MI60239 BULK MATERIAL HANDLING 3-0-0 MI (C3) NC443 MS3107 MATERIAL SCIENCE 3-0-0 MS (F3) NC322 MS60009 FUNDAMENTALS OF ELECTRONIC MATERIALS 3-0-0 MS (F3) NC322 MS60009 FUNDAMENTALS AND PROPERTIES OF NANOCLUSTERS 3-1-0 MS (F3) NC322 PE40010 PETROLEUM ENGINEERING FUNDAMENTALS 3-0-0 MS (F3) MI3120 PE60010 DRILLING AND HYDROFRACKING TECHNOLOGY 3-0-0 DE (H3) MI3120 PE60010 DRILLING AND HYDROFRACKING TECHNOLOGY 3-0-0 DE (H3) MI3120								NC313
MI60217 ENVIRONMENTAL ENGINEERING 3-0-0 MI (E3)				AI21201	CE21201			
MI60227 APPLIED AI, ML & DL TECHNIQUES 3-0-0 MI (S3) C MI60236 RISK AND RELIABILITY ENGINEERING 3-0-0 MI (G3) C MI60239 BULK MATERIAL HANDLING 3-0-0 MI (C3) NC443 MS31007 MATERIAL SCIENCE 3-0-0 MS (F3) NC322 MS6009 FUNDAMENTALS OF ELECTRONIC MATERIALS 3-0-0 MS (H3) Seminar Room 1 NT61201 FUNDAMENTALS AND PROPERTIES OF NANOCLUSTERS 3-0-0 MS (H3) Seminar Room 1 PE40001 PETROLEUM ENGINEERING FUNDAMENTALS 3-0-0 DE (H3) C PE60010 DRILLING AND HYDROFRACKING TECHNOLOGY 3-0-0 DE (H3) C PE60010 DRILLING AND HYDROFRACKING TECHNOLOGY 3-0-0 DE (H3) C PE60010 DRILLING AND HYDROFRACKING TECHNOLOGY 3-0-0 DE (H3) C PE60010 CARBON GEO-STORAGE AND MONITORING 3-0-0 DE (H3) C PH50025 PH				WIZIZUI	CEZIZUI			
MI60236 RISK AND RELIABILITY ENGINEERING 3-0-0 MI (G3) NC443 MI60239 BULK MATERIAL HANDLING 3-0-0 MI (C3) NC443 MS31007 MATERIAL SCIENCE 3-0-0 MS (F3) NC322 MS6009 FUNDAMENTALS OF ELECTRONIC MATERIALS 3-0-0 MS (H3) Seminar Room 1 NT61201 FUNDAMENTALS AND PROPERTIES OF NANOCLUSTERS 3-1-0 NT (V4) PERCEDUAL MEDIAL								
Mi60239 BULK MATERIAL HANDLING 3-0-0 MI (C3) NC443 MS31007 MATERIAL SCIENCE 3-0-0 MS (F3) NC322 MS50009 FUNDAMENTALS OF ELECTRONIC MATERIALS 3-0-0 MS (H3) Seminar Room 1 NT61201 FUNDAMENTALS AND PROPERTIES OF NANOCLUSTERS 3-1-0 NT (V4) PE40001 PETROLEUM ENGINEERING FUNDAMENTALS 3-0-0 DE (03) C PE60010 DRILLING AND HYDROFRACKING TECHNOLOGY 3-0-0 DE (M3) C PE60010 DRILLING AND HYDROFRACKING TECHNOLOGY 3-0-0 DE (M3) C PE60010 DRILLING AND HYDROFRACKING TECHNOLOGY 3-0-0 DE (M3) C PE60010 CARBON GEO-STORAGE AND MONITORING 3-0-0 DE (M3) C PE60010 CARBON GEO-STORAGE AND MONITORING 3-0-0 DE (V3) C PH30223 SEMICONDUCTOR PHYSICS 3-0-0 PH (F3) NC314 PH50325 PHYSICS OF SEMICONDUCTOR DEVICES								
MS31007 MATERIAL SCIENCE 3-0-0 MS (F3) NC322 MS50009 FUNDAMENTALS OF ELECTRONIC MATERIALS 3-0-0 MS (H3) Seminar Room 1 NT5121 FUNDAMENTALS AND PROPERTIES OF NANOCLUSTERS 3-1-0 NT (V4) PE40001 PETCLUM ENGINEERING FUNDAMENTALS 3-0-0 DE (D3) PE60010 DRILLING AND HYDROFRACKING TECHNOLOGY 3-0-0 DE (H3) PE60010 RESERVOIR SIMULATION 3-0-0 DE (U3) PE60010 ENHANCED OIL RECOVERY 3-0-0 DE (V3) PE60010 CARBON GEO-STORAGE AND MONITORING 3-0-0 DE (V3) PH30223 SEMICONDUCTOR PHYSICS 3-0-0 PH (F3) NC314 PH58035 PHYSICS OF SEMICONDUCTOR DEVICES 3-0-0 PH (F3) NC314 PH60042 ADVANCED CONDENSED MATTER PHYSICS 3-1-0 PH (F3) NC314 PH600508 PHYSICS OF BIOMACROMOLECULES 3-0-0 PH (F3) PC RD3								NC442
MS60009 FUNDAMENTALS OF ELECTRONIC MATERIALS 3-0-0 MS (H3) Seminar Room 1 NT61201 FUNDAMENTALS AND PROPERTIES OF NANOCLUSTERS 3-1-0 NT (V4) PERODICAL MEDITION PE40001 PETROLEUM ENGINEERING FUNDAMENTALS 3-0-0 DE (D3) PERODICAL MEDITION PE60003 RESERVOIR SIMULATION 3-0-0 DE (U3) PERODICAL MEDITION PE60008 ENHANCED OIL RECOVERY 3-0-0 DE (S3) PERODICAL MEDITION DE (V3) PERODICAL MEDITION PRODICAL MEDITION </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>								
NT61201 FUNDAMENTALS AND PROPERTIES OF NANOCLUSTERS 3-1-0 NT (V4) PE40001 PETROLEUM ENGINEERING FUNDAMENTALS 3-0-0 DE (D3) PE60010 DRILLING AND HYDROFRACKING TECHNOLOGY 3-0-0 DE (H3) PE60003 RESERVOIR SIMULATION 3-0-0 DE (U3) PE60008 ENHANCED OIL RECOVERY 3-0-0 DE (S3) PE60009 CARBON GEO-STORAGE AND MONITORING 3-0-0 DE (V3) PH30223 SEMICONDUCTOR PHYSICS 3-0-0 PH (F3) NC321 PH58035 PHYSICS OF SEMICONDUCTOR DEVICES 3-0-0 PH (F3) NC314 PH60042 ADVANCED CONDENSED MATTER PHYSICS 3-1-0 PH (F4) PH60206 PHYSICS OF BIOMACROMOLECULES 3-0-0 PH (F4) RD30005 FUNDAMENTALS OF RURAL INNOVATION AND MANAGEMENT 3-0-0 PH (F4) RD51003 FINANCIAL TECHNOLOGY FOR RURAL AND AGRIBUSINESS DEVELOPMENT 3-0-0 RD								
PE40001 PETROLEUM ENGINEERING FUNDAMENTALS 3-0-0 DE (D3) PE60010 DRILLING AND HYDROFRACKING TECHNOLOGY 3-0-0 DE (H3) PE60003 RESERVOIR SIMULATION 3-0-0 DE (U3) PE60008 ENHANCED OIL RECOVERY 3-0-0 DE (S3) PE60009 CARBON GEO-STORAGE AND MONITORING 3-0-0 DE (V3) PH30223 SEMICONDUCTOR PHYSICS 3-0-0 PH (F3) NC321 PH58035 PHYSICS OF SEMICONDUCTOR DEVICES 3-0-0 PH (F3) NC314 PH60026 ADVANCED CONDENSED MATTER PHYSICS 3-1-0 PH (F4) PH60206 PHYSICS OF BIOMACROMOLECULES 3-0-0 PH (F4) RD30005 FUNDAMENTALS OF RURAL INNOVATION AND MANAGEMENT 3-0-0 PH (F4) RD51003 FINANCIAL TECHNOLOGY FOR RURAL AND AGRIBUSINESS DEVELOPMENT 3-1-0 RD								Sellillai Roolli 1
PE60010 DRILLING AND HYDROFRACKING TECHNOLOGY 3-0-0 DE (H3) PE60003 RESERVOIR SIMULATION 3-0-0 DE (U3) PE60008 ENHANCED OIL RECOVERY 3-0-0 DE (S3) PE60009 CARBON GEO-STORAGE AND MONITORING 3-0-0 DE (V3) PH30223 SEMICONDUCTOR PHYSICS 3-0-0 PH (F3) NC321 PH58035 PHYSICS OF SEMICONDUCTOR DEVICES 3-0-0 PH (F4) (F4) PH60026 PHYSICS OF BIOMACROMOLECULES 3-0-0 PH (F4) (F4) PH05026 PHYSICS OF BIOMACROMOLECULES 3-0-0 PH (F3) (F3) RD30005 FUNDAMENTALS OF RURAL INNOVATION AND MANAGEMENT 3-0-0 RD (F1) RD51003 FINANCIAL TECHNOLOGY FOR RURAL AND AGRIBUSINESS DEVELOPMENT 3-1-0 RD (F1)							. ,	
PE60003 RESERVOIR SIMULATION 3-0-0 DE (U3) PE60008 ENHANCED OIL RECOVERY 3-0-0 DE (S3) PE60009 CARBON GEO-STORAGE AND MONITORING 3-0-0 DE (V3) PH30223 SEMICONDUCTOR PHYSICS 3-0-0 PH (F3) NC321 PH58035 PHYSICS OF SEMICONDUCTOR DEVICES 3-0-0 PH (F3) NC314 PH60042 ADVANCED CONDENSED MATTER PHYSICS 3-1-0 PH (F4) PH PH05026 PHYSICS OF BIOMACROMOLECULES 3-0-0 PH (G3) PH RD30005 FUNDAMENTALS OF RURAL INNOVATION AND MANAGEMENT 3-0-0 RD PH RD51003 FINANCIAL TECHNOLOGY FOR RURAL AND AGRIBUSINESS DEVELOPMENT 3-1-0 RD PH								
PE60008 ENHANCED OIL RECOVERY 3-0-0 DE (53)								
PE60009 CARBON GEO-STORAGE AND MONITORING 3-0-0 DE (V3) PH30223 SEMICONDUCTOR PHYSICS 3-0-0 PH (F3) NC321 PH58035 PHYSICS OF SEMICONDUCTOR DEVICES 3-0-0 PH (F3) NC314 PH60042 ADVANCED CONDENSED MATTER PHYSICS 3-1-0 PH (F4) FM PH60206 PHYSICS OF BIOMACROMOLECULES 3-0-0 PH (G3) FM RD30005 FUNDAMENTALS OF RURAL INNOVATION AND MANAGEMENT 3-0-0 RD FM RD61003 FINANCIAL TECHNOLOGY FOR RURAL AND AGRIBUSINESS DEVELOPMENT 3-1-0 RD FM								
PH30223 SEMICONDUCTOR PHYSICS 3-0-0 PH (F3) NC321 PH58035 PHYSICS OF SEMICONDUCTOR DEVICES 3-0-0 PH (F3) NC314 PH60042 ADVANCED CONDENSED MATTER PHYSICS 3-1-0 PH (F4) PH60206 PHYSICS OF BIOMACROMOLECULES 3-0-0 PH (G3) RD30005 FUNDAMENTALS OF RURAL INNOVATION AND MANAGEMENT 3-0-0 RD RD61003 FINANCIAL TECHNOLOGY FOR RURAL AND AGRIBUSINESS DEVELOPMENT 3-1-0 RD								
PH58035 PHYSICS OF SEMICONDUCTOR DEVICES 3-0-0 PH (F3) NC314 PH60042 ADVANCED CONDENSED MATTER PHYSICS 3-1-0 PH (F4) F PH60206 PHYSICS OF BIOMACROMOLECULES 3-0-0 PH (G3) F RD30005 FUNDAMENTALS OF RURAL INNOVATION AND MANAGEMENT 3-0-0 RD F RD61003 FINANCIAL TECHNOLOGY FOR RURAL AND AGRIBUSINESS DEVELOPMENT 3-1-0 RD F								NC224
PH60042 ADVANCED CONDENSED MATTER PHYSICS 3-1-0 PH (F4) PH60206 PHYSICS OF BIOMACROMOLECULES 3-0-0 PH (G3) RD30005 FUNDAMENTALS OF RURAL INNOVATION AND MANAGEMENT 3-0-0 RD RD61003 FINANCIAL TECHNOLOGY FOR RURAL AND AGRIBUSINESS DEVELOPMENT 3-1-0 RD								
PH60206 PHYSICS OF BIOMACROMOLECULES 3-0-0 PH (G3) RD30005 FUNDAMENTALS OF RURAL INNOVATION AND MANAGEMENT 3-0-0 RD RD61003 FINANCIAL TECHNOLOGY FOR RURAL AND AGRIBUSINESS DEVELOPMENT 3-1-0 RD								NC314
RD30005 FUNDAMENTALS OF RURAL INNOVATION AND MANAGEMENT 3-0-0 RD RD51003 FINANCIAL TECHNOLOGY FOR RURAL AND AGRIBUSINESS DEVELOPMENT 3-1-0 RD								
RD61003 FINANCIAL TECHNOLOGY FOR RURAL AND AGRIBUSINESS DEVELOPMENT 3-1-0 RD								
N 1900129 SULPAND LEGIT, ROBBER & RUBBER LINE MALERIALS 34-0 KI (US)								
	K 120018	SCI AND 12011, RUDDEN & RUDDEN LINE MATERIALS	3-0-0			101	(US)	